

# Section 7



## WISEWOMAN Clinical Services

WISEWOMAN Services .....	7.1
Definition of WISEWOMAN Terms .....	7.1
WISEWOMAN Service Flow Chart .....	7.3
Initial and Annual Screening Requirements .....	7.4
Diagnostic Office Visit Requirements.....	7.6
Blood Pressure Screening Protocols .....	7.8
Laboratory Test Protocols .....	7.10
Cholesterol Screening Protocols.....	7.12
Diabetes Screening Protocols .....	7.14
Diabetes Screening Guidelines .....	7.15
Medication Access.....	7.16
Overweight and Obesity Assessment .....	7.17
Body Mass Index Chart .....	7.21
WISEWOMAN Service Summary .....	7.22

## WISEWOMAN Services

WISEWOMAN\* services are available only to SMHW clients.

WISEWOMAN offers the following CVH services to help women reduce their risk of heart disease and stroke:

- Risk factor screenings
- Diagnostic and referral services
- LSI

## Definition of WISEWOMAN Terms

### Initial and Annual Screening Assessment

- The WISEWOMAN screening assessment replaces the 10-minute screening office visit in order to avoid two office visit charges for the same service time. The screening assessment includes:
  - 1) Review of CVH risk factor measurements obtained during the SMHW office visit (two blood pressure measurements, height and weight for BMI).
  - 2) Review of lab work for cholesterol and glucose screening (reimbursed by WISEWOMAN).
  - 3) Assessing need and referring for follow-up lab work and/or follow-up medical evaluation of screening results.
  - 4) Referrals for lifestyle education to reduce risk of CVH.
- The WISEWOMAN CVH assessment should occur at the same appointment as the SMHW screening. Only a limited number of separate WISEWOMAN screening office visits is allowed by CDC. If exceptions are needed, contact the state central office WISEWOMAN staff for approval.
- The first WISEWOMAN assessment is an initial assessment even if the client is having an annual screening for SMHW. Annual WISEWOMAN screening assessments occur 11-18 months following a previous screening assessment. The annual screening assessment repeats the same assessments, clinical measurements, follow-up and referrals as on the initial assessment.

### Diagnostic Office Visit

- One diagnostic office visit, either 20 or 30 minutes in length, may be billed for clients with abnormal or alert screening values or risk factors that need further medical evaluation. The diagnostic office visit must be completed by a clinician who can, if needed, prescribe medications or other treatment.
- WISEWOMAN funds are restricted by Congressional law that states funds may only be used for prevention services, so additional follow-up office visits to monitor treatment may not be reimbursed.
- Screening providers must be able to link clients to medical services for medical evaluation and assist clients with access to low cost or free medication, if needed.

### **Laboratory Work Only (Lab Only)**

- Reimbursement is allowed for the specified CVH screening lab work if the lab work was taken either 30 days before or 30 days after the screening assessment date.
- Reimbursement for completion of second blood draw for lab work is warranted if specified in WISEWOMAN protocols (*refer to page 7.11*).
- If the initial lab work is suspicious for diagnosis of diabetes, an additional fasting lab test is warranted.
- If client risk factors on the CHD Risk Calculation (*Section B. on WISEWOMAN Screening Form*) total two or more and a fasting lipid panel was not obtained with the initial lab work, a second lab test for a fasting lipid panel is recommended. Only one fasting lipid panel is allowed per year.

### **Lifestyle Education Intervention (LSI) Only**

- If the LSI occurs at a different date or location than the screening office visit, providers should report the LSI by checking this visit type on the WISEWOMAN Screening form.

### **Referral Provider**

Referral providers deliver services that screening providers do not have the ability to provide, such as:

- Diagnostic office visits, which require clinicians who are qualified and licensed to perform the medical evaluation and prescribe medication for abnormal CVH screening results/risk factors.
- LSI which requires trained staff to provide individually tailored counseling based on clients' risk factors and motivation to change.

### **5-A Behavioral Counseling Framework**

The 5-A Behavioral Counseling Framework is the theory model used throughout each phase of WISEWOMAN services to facilitate and support clients in making changes to reduce their risk of heart disease and stroke. The 5-A's: Assess, Advise, Agree, Assist, and Arrange serve as a guide to ensure each client receives complete services.

Examples of activities in 5-A's action categories include, but are not limited to the following:

**Assess** heart disease and stroke risk factors, lifestyle behaviors, and readiness to make lifestyle behavior changes.

**Advise** based on screening results (risk counseling) and discuss the benefits of making lifestyle behavior changes to control risk factors.

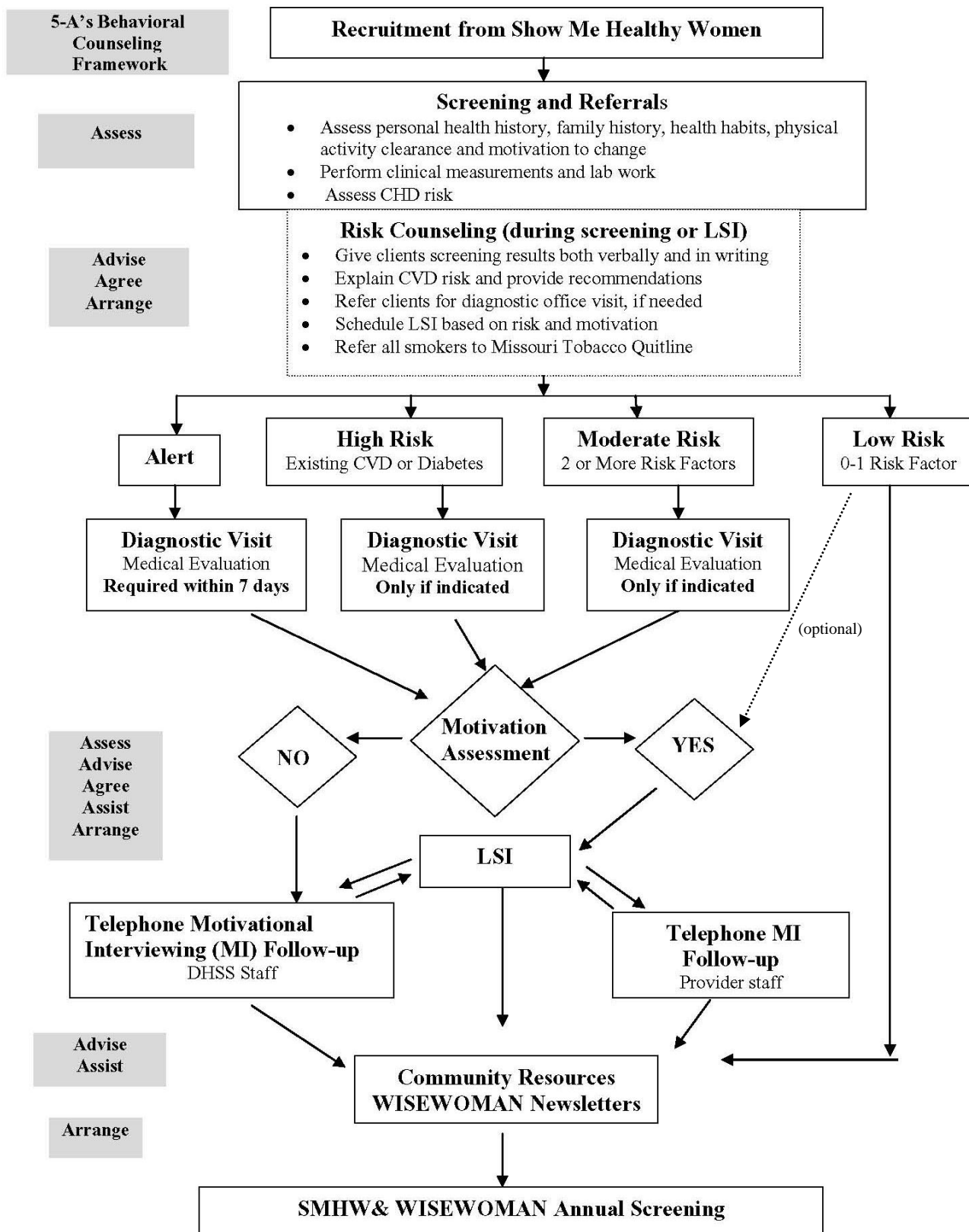
**Agree** using collaborative goal setting for lifestyle behaviors and if needed, obtaining medical care.

**Assist** in identifying strategies to adopt healthy lifestyle behaviors and obtain access to resources needed to control risk factors.

**Arrange** follow-up appointments for lifestyle intervention sessions, diagnostic office visits for medical evaluation, access to low-cost medical or community-based resources and annual screenings.

The flow chart on the following page illustrates how the 5-A's relates to WISEWOMAN services.

## WISEWOMAN Services Flow Chart



## Initial and Annual Screening Requirements

The WISEWOMAN initial or annual screening includes three major components:

### 1. Assessment Completed by the Client

- The client completes the WISEWOMAN Assessment form prior to the clinical screening as part of the registration process. The pink one-page form is to be completed on both the front and the back. Questions include personal and family history of CVD, lifestyle habits related to CVD risk and motivation and ability to make lifestyle changes.
- Provider staff should review and clarify the clients' responses for any missing or inconsistent responses during the screening visit.

### 2. Clinical Screening Measurements and Assessments

- The standards for cardiovascular health screenings are established by the CDC and the WISEWOMAN Medical Advisory Committee. Screening results are reported on the WISEWOMAN Screening form (also a pink form).
- All of the following must be completed to be reimbursed as a WISEWOMAN screening.

#### Screening Measurements:

- Height and weight for BMI (*refer to page 7.16*)
- Two blood pressure measurements (*refer to page 7.8*)
- Lab work for cholesterol, HDL and blood glucose (*refer to page 7.10*)

#### CHD Risk Calculation:

The assessment questions and screening measurements are used to estimate each client's risk of heart disease. Complete the risk calculator or use the MOSHAIC electronic form to determine the number of risk factors.

#### Physical Activity Clearance:

The screening clinician should evaluate the client's physical ability to exercise safely and check the box on the screening form if the client should not participate in physical activity.

### 3. Follow-up and Referrals for Abnormal Values

Providers must ensure that all clients:

- Receive their WISEWOMAN screening results both verbally and in writing.
- Have access to low-cost or free medical evaluation for treatment when screening results indicate medical evaluation based on screening standards (*refer to pages 7.7, 7.9 and 7.12*).
- Are assisted with access to low- or no-cost medications if they require drug therapy (*refer to page 7.15*).
- Receive lifestyle education to reduce their risk of heart disease and stroke.

Providers must document client refusals to participate in follow-up medical evaluation or lifestyle education and report in the “Comment” section of the screening form. Fax the refusal form (*refer to page 12.38*) to the WISEWOMAN program at (573)522-2899.

#### **4. Alert Value Follow-up and Referrals**

- Providers must assure that women who have dangerously high alert values have access to medical evaluation and treatment immediately or within seven days of the alert screening value (*refer to page 7.7*).
- The RPC should be notified immediately when an alert value is identified in order to ensure correct tracking and documentation.
- Make and document at least two attempts to contact clients for follow-up of alert findings before designating the client as “lost to follow-up.” One attempt should be by telephone and one by mail and, if no response, then refer promptly to the RPC for further attempts.

##### Documentation of Alert Values:

The following information regarding alert value follow-up should be documented on the WISEWOMAN screening report.

- Medical evaluation visit date
- Status of work-up: Use the following coding; numbering is not sequential
  1. Pending
  2. Complete (selected if the medical evaluation has occurred. The “Complete” designation does not refer to the control status of the condition or completion of additional follow-up).
  3. Not medically indicated; client being treated
  6. Not an alert reading
  7. No value recorded
  8. Client refused
  9. Not completed, client lost to follow-up

***The CDC uses the percent of alert values receiving medical evaluation within 7 days and the status of the workup of alert values as a performance measure to evaluate the WISEWOMAN programs.***

## Diagnostic Office Visit Requirements

A diagnostic office visit may be reimbursed for clients who have an abnormal blood pressure, cholesterol, or blood glucose screening result. The reason for the diagnostic office visit must be documented on the WISEWOMAN Screening form (*refer to page 12.34*).

Diagnostic office visit is considered a follow-up screening assessment. It is not intended to monitor the status of treatment. A diagnostic office visit is scheduled when further evaluation is needed to:

- confirm a new diagnosis of high blood pressure, high cholesterol or diabetes, or
- assess and prescribe medication or other treatment as recommended.

Only clinicians who can medically evaluate the abnormal screening value and prescribe medication may perform the diagnostic visit. If the screening clinic does not have a clinician who can perform the medical evaluations, the client should be referred to a qualified clinician outside of the clinics operations. In this situation, the clinic should have an agreement with the referral clinician regarding billing for the amount that WISEWOMAN will reimburse and how payment will be transferred from the provider to the referral clinician if they are not a WISEWOMAN provider. The WISEWOMAN Referral form (*refer to page 12.37*) is provided to assist in making referrals for medical evaluation.

Only one diagnostic visit is allowed per annual service cycle. Diagnostic visits should be scheduled as soon as possible after the screening assessment.

The following screening protocols should be followed in determining the need for diagnostic office visits and diagnosis of hypertension, high cholesterol and diabetes.

## Screening Standards

	Blood Pressure	Systolic (mmHg)	Diastolic (mmHg)
<b>Blood Pressure</b> JNC 7 – NHLBI (refer to page 7.9)	<b>Normal</b>	<b>&lt;120</b>	<b>and &lt;80</b>
	Prehypertension	120-139	or 80-89
	Stage 1 Hypertension	140-159	or 90-99
	Stage 2 Hypertension	≥160	or ≥100
	<b>*Alert</b>	>180	or >110
<b>Cholesterol</b> ATP III – National Cholesterol Education Program, NIH (refer to page 7.12)	<b>Normal</b>	<b>mg/dL</b> <b>&lt;200</b>	
	Elevated	≥200 but <400	
	<b>*Alert</b>	>400	
<b>Blood Sugar</b> American Diabetes Association (refer to page 7.14)	<b>Normal</b>	<b>FPG mg/dL</b> <b>&lt;100</b>	<b>2-h PG mg/dL</b> <b>&lt;140</b>
	Impaired fasting glucose (IFG)	≥100 but <126	-----
	Impaired glucose tolerance (IGT)		≥140 and <200
	Elevated	≥126 but <275	<b>Random or 2- hr PG</b>
	<b>*Alert</b>	>275 or <50	≥200 >375

\*Alert measures determined by Centers for Disease Control and Prevention.



## Blood Pressure Screening Protocols

The blood pressure screening protocols are based on *The Seventh Report of the Joint National Committee on Prevention Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7)*, National Institutes of Health 2003, and CDC's *WISEWOMAN* guidelines.

Reducing high blood pressure has been shown to lower the risk of CVD. In clinical trials, treatment of high blood pressure has been associated with a 35-40 percent reduction in stroke incidence, a 20-25 percent reduction in heart attacks, and more than a 50 percent reduction in heart failure.

### Accurate Blood Pressure Measurement\*

1. Clients should refrain from smoking, exercising or ingesting caffeine for at least 30 minutes before measurement.
2. Clients should be seated quietly for at least five minutes in a chair (rather than on an exam table), with feet on the floor, and arm supported at heart level.
3. Clients should be relaxed and not talking.
4. An appropriate size cuff (cuff bladder encircling at least 80 percent of the arm) should be used to ensure accuracy. Many adults require a large adult cuff.
5. Make the measurement with a mercury sphygmomanometer, a recently calibrated aneroid manometer, or a validated electronic device.
6. SBP is the point at which the first of two or more sounds is heard (phase one) and DBP is the point before the disappearance of sounds (phase five).
7. At least two measurements, separated by about two minutes, should be measured and recorded. If the first two readings differ by more than 5mm Hg, obtain additional readings.
8. Clinicians should provide the client, both verbally and in writing, their specific blood pressure numbers and goals.

**\*Accurate blood pressure measurements are necessary for correct diagnosis and classification of hypertension. The JNC 7 guidelines may be accessed at:**  
<http://www.nhlbi.nih.gov/guidelines/hypertension>

## Blood Pressure Classification

Elevated blood pressure measurements, with the exception of alert values, should be confirmed with a second measurement at a follow-up visit, if feasible.

### Blood Pressure Classification and WISEWOMAN Services

Classification	SBP (mmHg)	DBP (mmHg)	WISEWOMAN Service	*Recommended JNC 7 Treatment (Treatment not reimbursed by SMHW)
Normal	< 120	and < 80	- LSI	
Pre-hypertension	120-139	or 80-89	- LSI - For compelling conditions, refer for medical evaluation treatment	- Drug therapy for compelling conditions (diabetes, existing CVD, chronic kidney disease) - Refer to specific JNC 7 guidelines
Stage 1 Hypertension (HTN)	140-159	or 90-99	- LSI - Confirm new HTN with rescreen < 2 months - Medical referral for confirmed HTN	- Drug therapy - Consider two-drug therapy - Refer to specific JNC 7 guidelines
Stage 2 Hypertension	≥ 160	or ≥ 100	- LSI - Confirm HTN with rescreen < 1 month - Medical referral for confirmed HTN	
Alert	> 180	or > 110	- Refer for <b>immediate (&lt; 7 days)</b> medical evaluation - Track and report date of medical evaluation and treatment - <b>Case Management</b> - LSI	- Drug therapy - Refer to specific JNC 7 guidelines

\*Federal WISEWOMAN legislation excludes use of funds for medical treatment.

*The JNC 7 report recognizes that the responsible physician's judgment remains paramount.*

Although treatment services are not reimbursed for WISEWOMAN clients, providers are responsible to assure that women receive assistance with access to the recommended medical evaluation and treatment, including low- or no-cost prescription medications.

## Laboratory Test Protocols

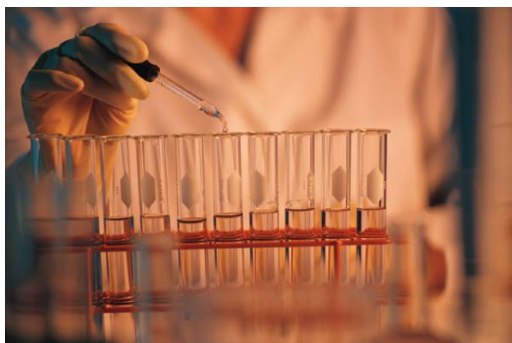
### Screening Assessment Lab Work

Laboratory tests are required for completion of the initial and annual office visit. An allowance may be made for lab work completed up to 30 days prior or 30 days following the screening office visit. It is recommended that the WISEWOMAN Assessment form (*refer to page 12.32*) be completed by the client prior to her receiving her lab results. This is to assure consistent client responses relating to previous diagnosis of high cholesterol or diabetes prior to the WISEWOMAN screening assessment.

Required blood results include:

- TC and HDL-C
  - If client is fasting, obtain TC and HDL-C using a FLP.
  - If client is not fasting, obtain only TC and HDL-C.
  - Only one FLP will be reimbursed per client per year.
- Blood glucose or A1C
  - For blood glucose, use either quantitative blood glucose or, reagent strip blood glucose.
  - A1C is required if client has previous diagnosis of diabetes.
  - A1C may be used for screening for diabetes instead of the glucose test. (Note the previous diagnosis on the WISEWOMAN Assessment form).
  - Reimbursement will be made for either blood glucose or A1C, but not both at the screening office visit.
- Fasting status must be reported. Check “Yes” or “No” for clients fasting status on the WISEWOMAN screening form.

Lab Work Summary	
<p><b><u>If client is NOT fasting:</u></b></p> <ul style="list-style-type: none"> <li>○ Total blood cholesterol and HDL-C</li> <li>○ Glucose quantitative or blood glucose reagent strip or A1C</li> </ul>	<p><b><u>If client is fasting:</u></b></p> <ul style="list-style-type: none"> <li>○ Fasting Lipid Panel</li> <li>○ Glucose quantitative or blood glucose reagent strip or A1C</li> </ul>



## Second Lab Work

Reimbursement is provided for a second blood draw for clients who need follow-up screening. The client must be fasting for the second blood draw and it must be obtained on a different date.

The following lab tests qualify for a second blood draw.

- Fasting lipid panel (if not done on initial screening). Order if total cholesterol and/or HDL cholesterol are abnormal at first office visit or if client has two or more CVD risk factors (*refer to page 12.34, Section F*).
- Blood glucose, quantitative or BG strip (fasting).

If the client has a diagnostic office visit and needs lab, schedule the lab work so the results are available at the time of the diagnostic medical evaluation.

Check “Lab Only” on the top of the screening form when reporting lab work not completed on the screening assessment date.

## Cholesterol Screening Protocols

Cholesterol screening protocols are based on *ATP III (Third Report of the Expert Panel on Detection, Evaluation, and Treatment of High Cholesterol in Adults)*, National Cholesterol Education Program, National Institutes of Health, 2001 and *NCEP Report: Implications of Recent Clinical Trials for the National Cholesterol Education Program Adult Treatment Panel III Guidelines*. Circulation July 13, 2004. <http://www.circulationaha.org>.

Elevated blood cholesterol is a major risk factor for heart disease. Identifying and reducing high blood cholesterol has been shown to reduce the risk of heart disease.

### Cholesterol Classification and WISEWOMAN Services

Classification	Blood Cholesterol (mg/dL)	WISEWOMAN Service	*ATP III Treatment (Treatment not reimbursed by SMHW)
<b>Desirable</b>	< 200	- LSI	
<b>Borderline High</b>	200-239	- LSI - Medical referral if high risk	Refer to ATP III for drug treatment guidelines based on CVD risk factors
<b>High</b>	$\geq 240$	- LSI - Medical referral	
<b>Alert</b>	400	- Treatment - Track and report date of medical evaluation and treatment - Case management - LSI	



## Major Risk Factors that Modify Low Density Lipid Goals Resources for Evaluation and Treatment

LDL goals should be modified and women referred to the lifestyle interventions if any of the following additional risk factors are present.

- Cigarette smoking
- Hypertension (BP >140/90 mm/Hg or on antihypertensive medication)
- Low HDL Cholesterol (< 40 mg/dl)\*
- Family history of premature CVD (CVD in male first degree relative <55 years or female first degree relative <65 years)
- Age >55 years

\* HDL cholesterol  $\geq 60$  counts as a “negative” risk factor. A high HDL removes one risk factor from the total count.

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***If a woman has two or more of the major risk factors, a fasting lipid panel is recommended.***

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Risk Classification	LDL Goal mg/dL	Initiate TLC mg/dL	Consider Drug Therapy mg/dL (Treatment not reimbursed by WISEWOMAN)
High risk: CVD, non-coronary forms of atherosclerosis, diabetes or 10-year risk score >20 percent	< 100 < 70 optimal	$\geq 100$	100 + < 100 optional
Moderately high risk: 2 + risk factors and 10-year risk score 10- 20 percent	< 130 < 100 optimal		$\geq 130$ 100-129 optional
Moderate risk: 2 + risk factors and 10-year risk score <10% percent	< 130		$\geq 160$
Lower risk: 0-1 risk factor	< 160	$\geq 160$	$\geq 190$ 160-189 optional

Source: NCEP Report: Implications of Recent Clinical Trials for the National Cholesterol Education Program Adult Treatment Panel III Guidelines. Circulation. July 13, 2004. <http://www.circulationaha.org>.

## Diabetes Screening Protocols

Diabetes screening protocols are based on *American Diabetes Association's Clinical Practice Guidelines, 2010*.

The WISEWOMAN program provides reimbursement for blood glucose screening since individuals with undiagnosed or uncontrolled diabetes are at significantly higher risk for stroke, coronary heart disease and peripheral vascular disease. Cardiovascular risk factors of dyslipidemia, hypertension and obesity occur more frequently in people with diabetes.

If results from the first glucose screening at the initial visit are abnormal, the WISEWOMAN program will reimburse providers for one follow-up fasting blood glucose test. Two abnormal test results on two different days are necessary for the diagnosis of diabetes.

**An A1C test is not to be used as a screening or diagnostic test.**

### Blood Glucose Classification and WISEWOMAN Services

Classification	Blood Glucose mg/dL	WISEWOMAN	*ADA Clinical Practice Guidelines – Treatment
<b>Desirable</b>	FPG < 100	- LSI	
<b>Prediabetes</b> Impaired Fasting Glucose (IFG)	FPG $\geq$ 100, but < 126	- LSI - Medical referral if high risk	
<b>Diabetes</b>	FPG $\geq$ 126 mg/dL Casual $\geq$ 200	- Rescreen on different day - LSI - Medical referral for confirmed new diabetes	- Medical evaluation and treatment based on ADA guidelines, including drug therapy if needed  - Diabetes education
<b>Alert</b>	FPG or Casual > 375	- Refer for immediate (< 7 days) medical evaluation and treatment - Track and report date of medical evaluation and treatment - Case Management - LSI	

**\*Federal WISEWOMAN legislation excludes use of funds for medical treatment.**

Although treatment services, including diabetes education and medical nutrition therapy, are not reimbursable through the WISEWOMAN program, providers are responsible for assuring that women receive assistance with access to the recommended medical evaluation and treatment, including low- or no-cost prescription medications.

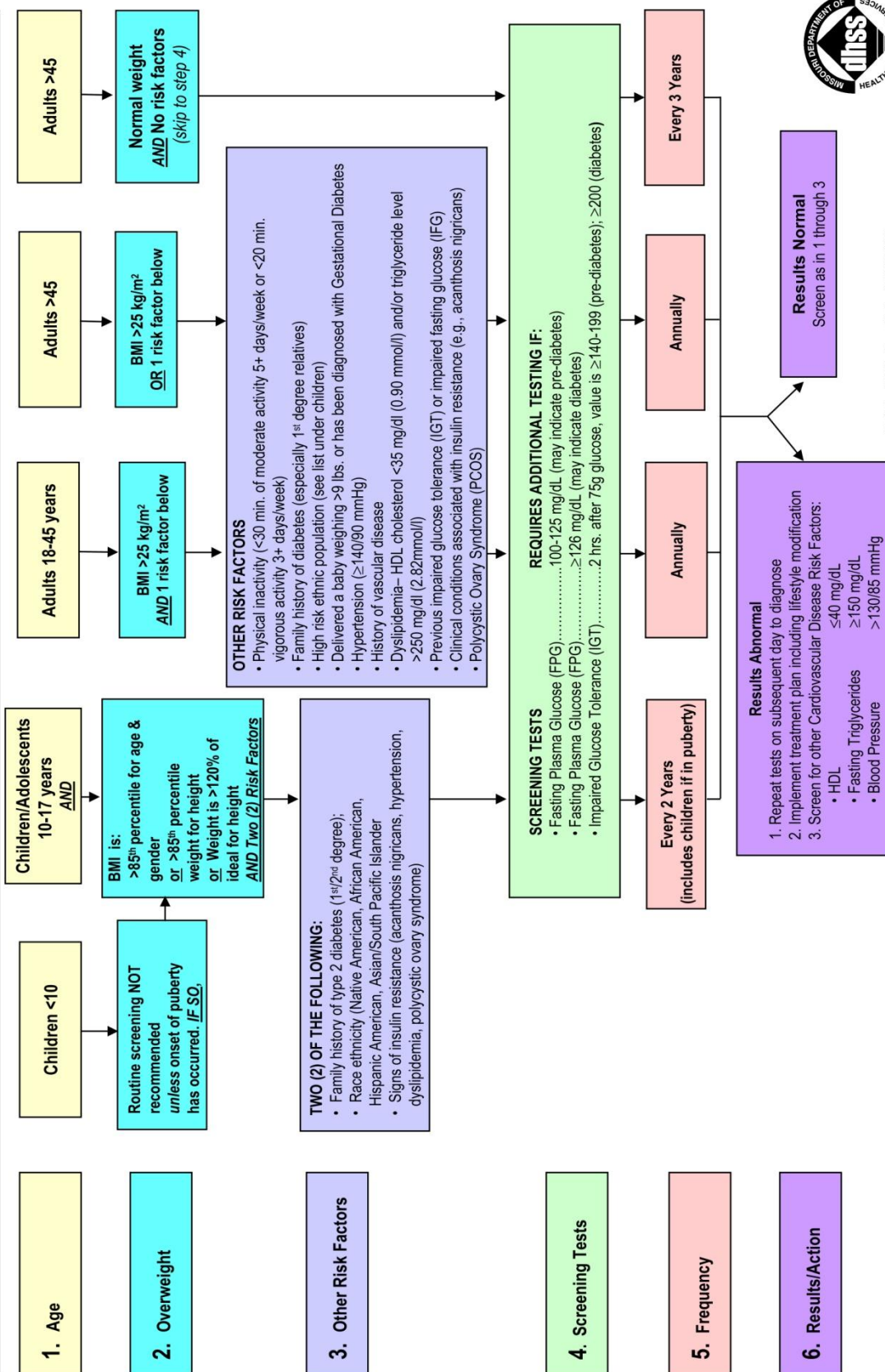
All women, even if screening measurements are normal, should be scheduled for the lifestyle education intervention and annual screening assessment at 11-18 months following the initial screening assessment.

**All women with elevated values should be instructed on goals for blood glucose levels.**

# State of Missouri Consensus Screening Guidelines for Pre-diabetes and Diabetes in a Medical Setting

Developed by the Diabetes Screening Guidelines Work Group and supported by the Missouri Association of Health Plans Education and Research Foundation and the Missouri Department of Health and Senior Services

**Consensus Panel Recommendations:** Although the entire Missouri population is at risk for diabetes, current evidence is insufficient to recommend for or against routinely screening asymptomatic individuals for type 2 diabetes, impaired glucose tolerance, or impaired fasting glucose. The purpose of screening is to identify persons previously not diagnosed with pre-diabetes or diabetes. To effectively utilize resources, screening efforts should be directed to individuals exhibiting risks for diabetes as outlined below. Additional research is needed to determine effective approaches for screening in venues outside the medical setting.



Reference: American Diabetes Association Standards of Medical Care in Diabetes, Diabetes Care 28:S5-S7, 2005.

Original Effective Date: 1/18/2006





## Medication Access

WISEWOMAN funds cannot be used for treatment services, including prescription medications or follow-up office visits with the purpose of monitoring and adjusting medications. Although WISEWOMAN cannot fund treatment, providers are required to have a system in place to assist women in receiving treatment, including medications, recommended by national guidelines. The following table provides resources for discounted or free medications.

**Providers are encouraged to contact any major retail chain pharmacies in their area for information on low-cost generic medications.**

### Patient and Physician Resources for Discounted and Free Medication\*

Resource	Description	Contact Information
Missouri RX Plan (MoRx)	MoRx is Missouri's State Pharmacy Assistance Program. MoRx was created by the 93rd General Assembly to provide prescription drug assistance to Missourians in need by coordinating benefits with Medicare's (Part D) Prescription Drug Program.	<a href="http://www.morx.mo.gov">http://www.morx.mo.gov</a>
340B Drug Discount Program	A Health Resources and Services Administration program that gives certain federally funded grantees access to low-cost pharmaceutical drugs.	<a href="http://www.hrsa.gov/opa/introduction.htm">http://www.hrsa.gov/opa/introduction.htm</a>
Rx Assist	A Web site developed by Volunteers in Health Care, a program of the Robert Wood Johnson Foundation, to provide health care practitioners with information on how to access programs that offer a limited supply of free or low-cost medications.	<a href="http://www.rxassist.org/">http://www.rxassist.org/</a>
Rx Hope	A free program that helps physicians' offices apply for, obtain, and track requests for no-cost medications offered by federal, state, and charitable organizations.	<a href="https://www.rxhope.com/">https://www.rxhope.com/</a>
The Medicine Program	A program that helps clients apply to pharmaceutical companies' indigent patient programs.	<a href="http://www.freemedicineprogram.org/">http://www.freemedicineprogram.org/</a>

\*Links are provided solely as a service and do not constitute endorsements of these organizations or their programs.

## Overweight and Obesity Assessment

Assessment and treatment guidelines for overweight or obese WISEWOMAN clients are based on the recommendations of the Health Care Work Group of the Missouri Council for Activity & Nutrition (MoCAN).

Height and weight measurements for determining BMI are to be obtained at the Show Me Healthy Women screening office visit. BMI is calculated using the following formula.

$$\text{BMI} = \frac{\text{weight (kg)}}{\text{height squared (m}^2\text{)}}$$

$$\text{BMI} = \frac{\text{weight (lbs)}}{\text{height squared (in}^2\text{)}} \times 703$$

Use the BMI chart (*refer to page 7.20*) or a BMI wheel for quick BMI assessment.

## MoCAN Activity & Nutrition Provider Tool Kit

The following information is included in the MoCAN Adult Activity & Nutrition Health Care Provider Tool Kit. MoCAN originated as an entity of the Missouri Department of Health and Senior Services' Bureau of Health Promotion and is now housed at the University of Missouri Extension. The tool kit was designed to assist doctors and other health professionals to screen for and treat adult overweight and obesity. This information is being reproduced with MoCAN's permission.



### Health Consequences of Obesity

According to the 2001 *U.S. Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity*, those who are overweight or obese are at a greater risk for the following health conditions:

#### Premature Death:

- Individuals who are obese have a 50 to 100% increased risk of premature death from all causes, compared to individuals with a healthy weight.
- An estimated 300,000 deaths per year may be attributable to obesity.
- The risk of death rises with increasing weight.
- Even moderate weight excess (10 to 20 pounds for a person of average height) increases the risk of death, particularly among adults aged 30 to 64 years.

#### Heart Disease:

- The incidence of heart disease is increased in persons who are overweight or obese.
- High blood pressure is twice as common in adults who are obese than in those who are at a healthy weight.
- Obesity is associated with elevated triglycerides and decreased HDL cholesterol.

#### Diabetes:

- A weight gain of 11 to 18 pounds increases a person's risk of developing type 2 diabetes to twice that of individuals who have not gained weight.
- More than 80% of people with diabetes are overweight or obese.

**Cancer:**

- Overweight and obesity are associated with an increased risk for some types of cancer including endometrial (cancer of the lining of the uterus), colon, gallbladder, prostate, kidney and postmenopausal breast cancer.
- Women gaining more than 20 pounds from age 18 to midlife double their risk of postmenopausal breast cancer, compared to women whose weight remains stable.

**Breathing Problems:**

- Obesity is associated with a higher prevalence of asthma.

**Arthritis:**

- For every two-pound increase in weight, the risk of developing arthritis is increased by 9 to 13%.

**Reproductive Complications:**

- In addition to many other complications, women who are obese during pregnancy are more likely to have gestational diabetes and problems with labor and delivery.

**Benefits of Weight Loss**

- Weight loss, as modest as 5 to 10% of total body weight in a person who is overweight or obese, reduces the risk factors for some diseases, particularly heart disease.
- A person with a Body Mass Index (BMI) above the healthy weight range may benefit from weight loss, especially if he or she has other health risk factors, such as high blood pressure, high cholesterol, smoking, diabetes, a sedentary lifestyle, and a personal and/or family history of heart disease.
- Weight loss can result in lower blood pressure, lower blood sugar, and improved cholesterol levels.

**Metabolic Syndrome**

According to the National Cholesterol Education Program Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III), metabolic syndrome is defined as having three or more of the traits shown below. Identification of metabolic syndrome requires even greater urgency for the treatment of overweight or obesity.

Risk factor	Defining level
<b>Abdominal obesity</b> <i>Men</i> <i>Women</i>	Waist circumference >40 in (>102 cm) >35 in (>88 cm)
<b>Triglycerides</b>	>150 mg/dL
<b>High-density lipoprotein (HDL) cholesterol</b> <i>Men</i> <i>Women</i>	<40 mg/dL <50 mg/dL
<b>Blood pressure</b>	≥130/≥85 mmHg
<b>Fasting glucose</b>	110-125 mg/dL (ATP III defines as ≥110)

## Assessment and Treatment of Adult Overweight and Obesity

### Step 1. Measure Height, Weight & Waist Circumference

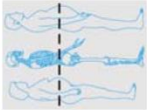
#### How to measure waist circumference:

Locate the upper hip bone and the top of the right iliac crest. Place a measuring tape in a horizontal lane around the abdomen at the level of the iliac crest. Before reading the tape measure, ensure that the tape is snug, but does not compress the skin, and is parallel to the floor. The measurement is made at the end of a normal expiration.

\*High-Risk Waist Circumference:

**Men:** >40 in (>102 cm)

**Women:** >35 in (>88 cm)



### Step 2. Determine Body Mass Index (BMI)

#### Use BMI Chart or one of the formulas below:

BMI = weight (kg)/height squared (meters)

If pounds and inches are used:

BMI = [weight (lbs) x 703]/height squared (inches)

Class	BMI
Underweight	<18.5
Normal Weight	18.5-24.9
Overweight	25-29.9
Obesity (Class I)	30-34.9
Obesity (Class II)	35-39.9
Extreme Obesity (Class III)	≥40

### Step 3. Assess risk or existence of comorbid conditions

Patients can be classified as being at high absolute risk for obesity-related disorders if they have three or more of the multiple risk factors listed below:

- Cigarette Smoking
- Hypertension
- Family history of premature CHD
- High LDL cholesterol (≥ 160 mg/dL)
- Low HDL cholesterol (< 35 mg/dL)
- Impaired fasting glucose (110-125 mg/dL)

### Step 4. Assess Readiness to Change: Handout A

- Ask your patient to fill out Handout A to determine readiness to make healthy changes.
- A patient that is not ready to make changes may still benefit from a discussion about the importance of weight loss and the health risks associated with overweight and obesity.

### Step 5. Determine Treatment

Treatment	BMI Category				
	25-26.9	27-29.9	30-34.9	35-39.9	≥40
Diet, physical activity & behavior change	+	+	+	+	+
Pharmaco-therapy			+		+
Surgery			With comorbidities	With comorbidities	+

### Step 6. Set Goals

- Set reasonable weight goals that are a high priority for the patient and involve small changes.
- Involve a variety of health care professionals when possible (e.g., Registered Dietitian or Behaviorist).

Reducing weight by 5% - 10% can decrease chronic disease risk factors. Weight loss should not exceed 1-2 lbs/week and should be based on a calorie deficit of 500 - 1,000 kcal/day.

### Step 7. Recommend Treatment Options

- Tailor treatment to individual needs of patient.

### Step 7a. Prescribe Dietary Therapy:

Handouts B, C, D, E

- Reduce calories by 500 to 1,000 calories/day from the current level and have patient keep food diary.
- Recommend eating a variety of nutrient-dense foods from the basic food groups and limit intake of saturated and trans fats, added sugars, salt, and alcohol.

### Step 7b. Recommend Physical Activity Guidelines: Handouts F, G

- Previously sedentary people should start with short sessions (5-10 minutes) of physical activity and gradually build up to the desired level of activity.
- **To reduce chronic disease risk:** Be physically active for at least 30 minutes on most or all days of the week.
- **To lose weight:** Be physically active for 60 to 90 minutes a day.

### Step 7c. Suggest Behavior Therapy:

Handouts H, I, J, K, L

- Address the patient's barriers about ability to make and maintain needed changes.
- Recommend specific lifestyle changes.
- Create a plan to promote weight loss or prevent further weight gain.

### Step 7d. Consider Additional Treatment Options (if needed)

#### Pharmacotherapy

- Medications should only be considered if lifestyle changes do not induce weight loss after 6 months.
- Weight loss drugs (FDA approved) may be used as part of a weight loss program for patients:
  - With a BMI ≥30 with no accompanying obesity-related risk factors or diseases OR
  - With a BMI ≥27 with accompanying obesity-





## Surgery

- Weight loss surgery is a possible option in patients who encompass the following:
  - Clinically severe obesity (i.e., persons with a BMI  $\geq 40$  or with a BMI  $\geq 35$  with comorbid conditions).
  - Less invasive methods have failed.
  - At high risk for obesity-related morbidity and mortality (NHLBI).

## Step 8. Continue Monitoring and Follow-up

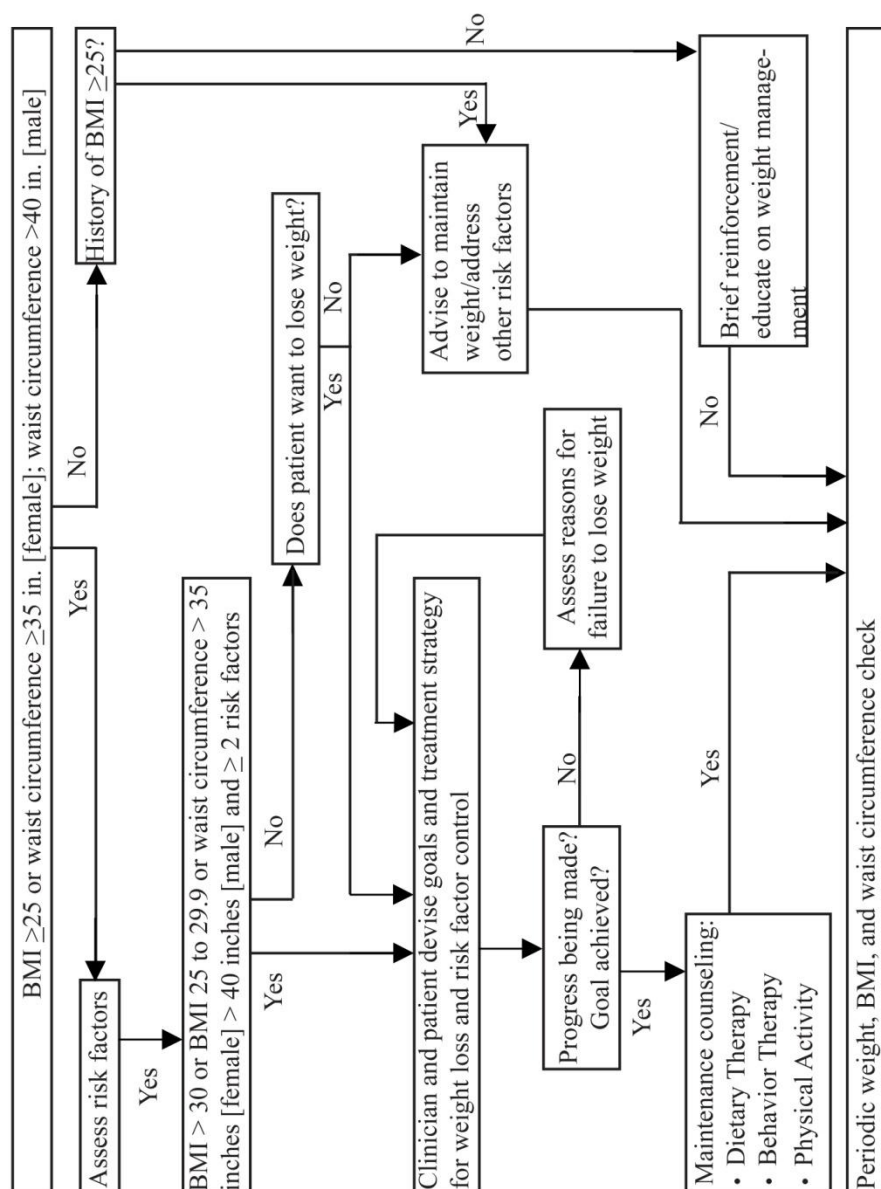
- Conduct periodic weight, BMI, and waist circumference checks.



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## Algorithm of Assessment and Treatment



Source:

Adapted from Kushner, RF, Roadmaps for Clinical Practice: Case Studies in Disease Prevention and Health Promotion-Assessment and Management of Adult Obesity: A Primer for Physicians. Chicago, Ill: American Medical Association; 2003.

BMI calculator: [http://www.nhlbi.nih.gov/guidelines/obesity/bmi\\_tbl.htm](http://www.nhlbi.nih.gov/guidelines/obesity/bmi_tbl.htm)

Body Mass Index Table																																					
Normal										Overweight										Obese										Extreme Obesity							
BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	
Height (inches)	Body Weight (pounds)																																				
58	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167	172	177	181	186	191	196	201	205	210	215	220	224	229	234	239	244	248	253	258	
59	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173	178	183	188	193	198	203	208	212	217	222	227	232	237	242	247	252	257	262	267	
60	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179	184	189	194	199	204	209	215	220	225	230	235	240	245	250	255	261	266	271	276	
61	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185	190	195	201	206	211	217	222	227	232	238	243	248	254	259	264	269	275	280	285	
62	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191	196	202	207	213	218	224	229	235	240	246	251	256	262	267	273	278	284	289	295	
63	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197	203	208	214	220	225	231	237	242	248	254	259	265	270	278	282	287	293	299	304	
64	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204	209	215	221	227	232	238	244	250	256	262	267	273	279	285	291	296	302	308	314	
65	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210	216	222	228	234	240	246	252	258	264	270	276	282	288	294	300	306	312	318	324	
66	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216	223	229	235	241	247	253	260	266	272	278	284	291	297	303	309	315	322	328	334	
67	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223	230	236	242	249	255	261	268	274	280	287	293	299	306	312	319	325	331	338	344	
68	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230	236	243	249	256	262	269	276	282	289	295	302	308	315	322	328	335	341	348	354	
69	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236	243	250	257	263	270	277	284	291	297	304	311	318	324	331	338	345	351	358	365	
70	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243	250	257	264	271	278	285	292	299	306	313	320	327	334	341	348	355	362	369	376	
71	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250	257	265	272	279	286	293	301	308	315	322	329	338	343	351	358	365	372	379	386	
72	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258	265	272	279	287	294	302	309	316	324	331	338	346	353	361	368	375	383	390	397	
73	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265	272	280	288	295	302	310	318	325	333	340	348	355	363	371	378	386	393	401	408	
74	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272	280	287	295	303	311	319	326	334	342	350	358	365	373	381	389	396	404	412	420	
75	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279	287	295	303	311	319	327	335	343	351	359	367	375	383	391	399	407	415	423	431	
76	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287	295	304	312	320	328	336	344	353	361	369	377	385	394	402	410	418	426	435	443	

Source: Adapted from Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report.

## WISEWOMAN Service Summary

Service	Service Description
<b>Initial and annual screening</b> , assessment (at same time as SMHW screening assessment)	<ul style="list-style-type: none"> <li>❑ Client signs joint agreement to participate in both SMHW and WISEWOMAN services.</li> <li>❑ Client completes WISEWOMAN Assessment form (front and back).</li> </ul> <p><b>Clinical Measurements:</b></p> <ul style="list-style-type: none"> <li>❑ Height and weight for BMI.</li> <li>❑ Two blood pressure measurements.</li> <li>❑ Lab work: Total cholesterol + HDL cholesterol Blood glucose (fasting or casual) <u>or</u> A1C. A1C may be used for screening <u>or</u> to assess diabetes control with previous diagnosis of diabetes.</li> </ul> <p><b>Assessments and Referrals</b></p> <ul style="list-style-type: none"> <li>❑ Evaluate screening results (including lab results when available).</li> <li>❑ Assess and document clearance for physical activity.</li> <li>❑ Schedule client for follow-up as needed: fasting lab work, diagnostic office visit and/or case management (alert values only).</li> <li>❑ Ensure alert value screening results receive medical evaluation within 7 days. Document scheduled or completed medical evaluation in Section D of the WISEWOMAN screening form.</li> </ul>
<b>Risk reduction counseling</b> (completed during screening office visit or at LSI)	<ul style="list-style-type: none"> <li>❑ Provide screening results to client both verbally and in writing.</li> <li>❑ Explain identified risk factors and recommendations to reduce risk.</li> <li>❑ Refer client to LSI either on site or at referral clinic or agency.</li> <li>❑ If client smokes, refer to Missouri Tobacco Quitline.</li> <li>❑ Refer client to available community resources to support healthy lifestyle habits.</li> <li>❑ If client refuses LSI or medical referral, note this in comments on the screening form. Notify central office staff if client is high risk, but will not participate in LSI. Fax or mail refusal.</li> </ul>
<b>Lab only</b> (only if indicated)	<ul style="list-style-type: none"> <li>❑ Draw fasting blood for lab work, if indicated on first lab results or two or greater risk score.</li> <li>❑ Schedule lab work so results are known at diagnostic visit, if feasible.</li> </ul>
<b>Diagnostic office visit, 20 or 30 minute office visit</b> (only if indicated by abnormal blood pressure, cholesterol/lipid, or blood glucose screening results). Scheduled within 60 days.	<ul style="list-style-type: none"> <li>❑ Evaluate client's risk factors and provide diagnosis and treatment recommendations, if applicable.</li> <li>❑ Prescribe medication, if applicable.</li> <li>❑ Assist client with access to low-cost or free medications.</li> <li>❑ Measure blood pressure to verify elevated readings on initial visit.</li> <li>❑ Schedule or confirm scheduled LSI.</li> <li>❑ Document results and referrals on Section D of the screening form.</li> </ul>
<b>LSI</b>	<ul style="list-style-type: none"> <li>❑ Provide LSI based on client's risk factor(s) and readiness to change.</li> <li>❑ Link client to community resources to support healthy habits.</li> </ul>